

# Jose L. Blanco-Garcia

## Curriculum Vitae

### Current position

Research Scientist - Old Dominion University, Norfolk, VA, USA

### Personal Data

**Date of Birth:** August 3, 1957

**Place of Birth:** Chile

**Nationality:** Chilean and Spaniard

**Languages:** Spanish and English

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### Education

- Ph.D. in Oceanography - Old Dominion University, OEAS, Norfolk, VA. USA (2004).

- Professional degree of Oceanographer - Universidad Católica de Valparaíso, Valparaíso, Chile (1984)

- B.S. Physics - Universidad Católica de Valparaíso, Chile (1977)

### Research Interests

Study of physical processes in coastal areas (upwelling, buoyancy, estuaries, bays) their variability and relation with biological productivity. Time series and climate variability. Climatology. Oceanographic observation systems. Operational Oceanography

### Skills

- Experience in the use of software for data bases, image processing, graphics design, text editors, etc. in Windows and Unix environment. Programmer in Matlab and Fortran.
- Comprehensive experience in the operation of meteorological and oceanographic instruments (ADCP, CTD, towed profiling instrument (acrobat), optical instruments, etc.).
- Experience in the processing and use of satellite information (SST, altimetry, wind, color).
- Experience in the design and deployment of moorings.
- Extensive experience in Projects management
- Participant in and organizer of more than 50 large oceanographic expeditions along the coast of Chile and Antarctic Peninsula, and a large number of 1-2 days oceanographic cruises at coastal areas in Chile, Colombia, Honduras, Mexico and USA.

### Professional Experience

Sep 2007 – present      Research Scientist - Old Dominion University, Norfolk, VA. Actually I am working on the project “Offshore Wind, Wave and Current Environment Characterization” founded by Virginia Coastal Energy Research Consortium.

Apr 2005 – Aug 2007      Post-Doctoral Research Associate - Old Dominion University, Norfolk, VA

- Located at: Observational Science Branch, NASA WFF, Wallops Island, VA  
Coordination, execution and data processing of seasonal cruises along the  
Mid-Atlantic Bight, biweekly cruises off Wallops Island. Calibration and  
operation of optical Instruments. Installation of a bottom mounted ADCP on  
the continental shelf.
- Sep 2004 - Mar 2005 Professor – Universidad del Mar, Puerto Angel, Oaxaca, Mexico  
- Taught Introduction to Oceanography and Physical Oceanography to students  
of Oceanology and Marine Sciences.
- May 2000 - Sep 2004 Research Assistant - Old Dominion University - CCPO, Norfolk, VA, USA  
- Work with the principal investigator writing proposals, collecting and  
processing oceanographic data and writing research papers.
- 1991-2000 Principal Investigator - Instituto de Fomento Pesquero, Valparaíso, Chile  
- Write proposals, coordination with other disciplines, collect and process  
oceanographic data, and write research reports.
- 1987-1991 Logistics and Project Manager – Instituto Antartico Chileno, Chile  
- Coordination and implementation of the Chilean Antarctic research program.  
Project Management, Work with interdisciplinary and international teams.
- 1983-1986 Principal Investigator - Instituto de Fomento Pesquero, Santiago, Chile  
- Write proposals, coordination with other disciplines, collect and process  
oceanographic data, and to write research reports.
- 1980-1982 Research assistant - Instituto de Fomento Pesquero, Santiago, Chile  
- Write proposals, coordination with other disciplines, collect and process  
oceanographic data, and to write research reports.
- 1978-1980 Research assistant - Universidad Católica de Valparaíso, Valparaiso, Chile  
- Work with the principal investigator in the collection and processing of  
oceanographic data.

### **Teaching Experience**

Introduction to Oceanography  
 Introduction to Physical Oceanography  
 Seminars - Austral Ocean – Regional Oceanography  
 Time series analysis

### **Publications** (available online at <http://www.ccpo.odu.edu/~jlblanco>)

- Valle-Levinson, A., J. L. Blanco and M. Frangópulos. 2007. Depth-dependent overtides from internal tide reflection in a glacial fjord. *Estuaries and Coasts* 30(1):1-10.
- Valle-Levinson, A., J. L. Blanco and M. Frangópulos. 2006. Frontogenesis in a Magellan glacial fjord. *Ocean Dynamics* 56(3-4):217-227. DOI 10.1007/s10236-005-0048-8.
- Atkinson, L. P., J. Huthnance and J. L. Blanco. 2005. Circulation, Mixing and the Distribution of Re-Mineralized Nutrients. In: Robinson, A. R. and K. H. Brink. *The Sea* 13:227-267
- Escribano, R., S. Rosales and J. L. Blanco. 2004. Understanding upwelling circulation off Antofagasta (northern Chile): A three-dimensional numerical-modeling approach. *Continental Shelf Research* 24(1): 37-53.
- Valle-Levinson, A. and J. L. Blanco. 2004. Observations of wind influence on Exchange flows in a Strait of the Chilean Inland Sea. *Journal of Marine Research*. 62, 721-741
- Atkinson, L. P.; A. Valle-Levinson, D. Figueroa, R. De Pol-Holz, V. Gallardo, W. Schneider, J. L. Blanco and M. Schmidt. 2002. Oceanographic observations in Chilean coastal waters between Valdivia and Concepcion. *Journal of Geophysical Research*, 107(C7), 10.1029/2001JC000991

- Blanco, J. L.; M. E. Carr; A. Thomas and P. T. Strub. 2002. Oceanographic conditions off northern Chile during the 1996 La Niña and 1997-1998 El Niño: Part 1: Hydrographic conditions. *Journal of Geophysical Research* vol 107 No. C3, 10.1029/2001JC001002.
- Carr, M. E.; P.T. Strub; A. Thomas and J.L Blanco. 2002. Evolution of 1997-1999 El Niño conditions off the western coast of South America: a remote sensing perspective. *Journal of Geophysical Research*, Vol 107. No. C12, 3236
- Valle-Levinson, A., J.L. Blanco, J.J. Fierro. 2002. Observations of wind effects on exchange flows in a channel constriction of the Chilean Inland Sea. In the 2nd Meeting on the Physical Oceanography of Sea Straits, Villefranche, 15 th -19 th April 2002.
- Blanco, J. L.; A. Thomas; M. E. Carr and P. T. Strub. 2001. Seasonal Climatology of Hydrographic Conditions in the Upwelling Region off Northern Chile. *Journal of Geophysical Research*. Vol 106 No. C6, 11,451-11,467.
- Morales, C., J. L. Blanco, M. Braun and N. Silva. 2001. Chlorophyll-a distribution and associated oceanographic condition off northern Chile during the summer and autumn 1994 and seasonal comparison for period 1993-1994. *J. Mar. Biol. Ass. UK* 81: 193-206 (2001).
- Thomas, A., J. L. Blanco, M.E. Carr, P.T. Strub and J. Osses. 2001. Oceanographic conditions off Northern Chile during the 1996 La Nina and 1997-1998 El Niño. Part 2: Satellite-measured chlorophyll and temperature patterns. *Journal of Geophysical Research*, Vol 106, No.C1, 899-915.
- Valle-Levinson, A., J. Moraga, J. Olivares, J. L. Blanco. 2000. Tidal and residual circulation in a semi-arid bay: Coquimbo bay, Chile. *Continental Shelf Research* 20 (2000) 2009-2028.
- Uribe, E., y J. L. Blanco. 2001. Capacidad de los sistemas acuáticos para el sostenimiento de cultivo de pectinidos: El caso de *Argopecten purpuratus* en la bahía Tongoy, Chile. En: *Los Moluscos Pectinidos de Iberoamerica: Ciencia y Acuicultura*. A.N. Maeda-Martinez (ed.) 2001, Cap.12. 16p.
- Pizarro, G. J. L. Iriarte, V. Montecinos, J. L. Blanco y L. Guzman. 2000. Phytoplanktonic biomass distribution and maximum primary production in southern fjords and channels 47-50S) during October 1996. *Ciencia y Tecnología del Mar, CONA*. 23: 25-47 (In Spanish).
- Pizarro, L., J.L. Blanco, R. Martinez and A.R. Pineda. 2000. Meteorological and oceanographic adjustment in the Southeast Pacific during the La Nina 1999. Second jointed regional cruise, May 1999. South Pacific Permanent Commission (CPPS). Special Publication, 2000.
- Morales, C., S. Hormazabal and J. L. Blanco. 1999. Inter-annual variability in the meso-scale distribution of the upper boundary of the oxygen minimum layer off northern Chile (18-24S): Implications for the pelagic system and biogeochemical cycling. *Journal of Marine Research* 57, 909-932.
- Fuenzalida, R, J. L. Blanco; R. Nuñez; S. Hormazabal. 1999. Efectos oceanográficos y meteorológicos durante el evento El Niño 1997-98, en la zona de Iquique (20° S). *Rev. Invest. Cient. Tecnol.*, 5: 56-59., Antofagasta, Chile.
- Blanco, J.L., L. Pizarro, T. de la Cuadra, G.A. Camacho, R. Martinez y J. Quintana. 1998. Oceanographic and meteorological characteristics of the Southeast Pacific during the decline of El Niño 1997-98. Jointed regional cruise of May 1998. Contribution of the South Pacific Permanent Commission (CPPS) for the International year of the Oceans. Special Publication, 1998.
- Morales, C., J. L. Blanco, M. Braun, H. Reyes and N. Silva. 1996. Chlorophyll-a distribution and associated oceanographic condition in the upwelling region off Chile during the winter and spring 1993. *Deep-Sea Research I*, 43(3):267-289.
- Morales, C., M. Braun, H. Reyes, J.L. Blanco and A.G. Davies. 1996. Anchovy larval distribution in the coastal zone off northern Chile: the effect of low dissolved oxygen concentration and of a cold-warm sequence (1990-1995). *Investigaciones Marinas*. Valparaíso, Chile, 24: 77-96.
- Moraga, J., A. Valle-Levinson and J.L. Blanco. 1995. Hydrography and sea surface dynamics on the

- coastal region of the South-eastern Pacific (30S). *Investigaciones Pesqueras*. (Chile) 38: 55-73. (In Spanish)
- Alcocer, C., R. Kelly, M. Mendez, J. Carreno y J.L. Blanco. 1988. Alteraciones climáticas y oceanográficas asociadas al evento El Niño. *IFOP. Cienc. y Tec. del Mar, CONA* 12. 1988.
- Kelly, R. y J.L. Blanco. 1986. Hidrografía del estrecho Bransfield durante el verano austral 1985 (SIBEX-Fase II). *Ser. Cient. INACH(35)* :7-30; 1986.
- Kelly, R. y J.L. Blanco. 1986. Características oceanográficas de la zona norte de Chile durante la declinación de El Niño 1982/83. *Invest. Pesq. (Chile)*. 33:77-90.
- Kelly, R., J.L. Blanco y C. Martinez. 1986. Fluctuaciones ambientales de baja frecuencia y su relación con el índice gonádico de *Sardinops sagax* en el norte de Chile. *Boletín ERFEN N° 20* enero-marzo 1986.
- Blanco, J.L. y M. Diaz. 1985. Características Oceanográficas y desarrollo de "El Niño" 1982/83 en la zona norte de Chile. En: *Taller Nacional Fenómeno El Niño 1982/83*. Santiago. *Invest. Pesq. (Chile) Número Especial (32)*:191-193; 1985
- Kelly, R., J.L. Blanco y M. Diaz. 1985. Hidrografía del estrecho Bransfield durante el verano austral 1984 (SIBEX-Fase I). *Ser. Cient. INACH (33)*:15-48;1985.
- Kelly, R. y J.L. Blanco. 1984. Estudio Oceanográfico de las aguas del norte de Chile durante febrero y marzo de 1983. *Rev. Com. Per. Pacífico Sur*, (15):179-201, 1984.
- Kelly, R. y J.L. Blanco. 1984. Proceso de surgencia en punta Nugurne, Chile (lat. 36°S), marzo 1983. *Invest. Pesq. (Chile)* 31:89-94.

#### **b) Manuscripts submitted (2006-2007)**

- Blanco, J. L. Inter-Annual to Inter-Decadal Variability of Upwelling off Northern Chile. Regime Changes and a New Index Definition. Submitted to *Progress in Oceanography*.
- Blanco, J. L. and A. Valle-Levinson. Variabilidad de la Circulación en la Constricción de Meninea y como es Afectada por el Forzamiento del Viento. *Crucero CIMAR FIORDO 4*. Manuscript submitted to the journal *Ciencia y Tecnología del Mar (CONA)*, Chile.
- Fuenzalida, R., J. L. Blanco and W. Schneider. Humboldt Current System and Water Masses between Caldera and Eastern Island. (In Spanish) Manuscript submitted to the journal *Ciencia y Tecnología del mar (CONA)*, Chile.

#### **c) Manuscript in preparation**

- Blanco, J. L., L. P. Atkinson, C. Makinen and T. A. Moisan. Wind Variability over the Middle Atlantic Bight and its effects on the Coastal Circulation.
- Blanco, J. L., L. P. Atkinson, C. Makinen and T. A. Moisan. Circulation variability at the wallops coastal observatory laboratory.
- Blanco, J. L., L. P. Atkinson, C. Makinen and T. A. Moisan. Bio-optical properties and development of a subsurface chlorophyll maximum over the Atlantic Bight Shelf.
- Blanco, J. L. Inter-annual and spatial variability of the wind field along the South America coast.

#### **d) Others documents (Thesis)**

- Blanco, J. L. 2004. Inter-Annual to Inter-Decadal Variability of Upwelling and Anchovy Population off Northern Chile. A Dissertation submitted to the Faculty of Old Dominion University as Requirement for the Degree of Doctor of Philosophy in Oceanography. Old Dominion University, December 2004.
- Blanco, J. L. 1984. Circulation characteristics over the continental shelf off Talcahuano. Thesis for Professional degree of Oceanographer. *Escuela de Ciencias del Mar. Universidad Católica de Valparaíso*. 1984. (In Spanish)

#### **e) Others documents (Technical reports and presentations)**

During my work in the Instituto de Fomento Pesquero (Chilean Fisheries Research Institute), I wrote many technical reports (app 80) as result of my research. Also, during my career I have participated in a large number of seminars and meetings. That information it not included here.

#### **Peer Review**

For many years I have been peer reviewer of papers submitted to journals, and proposal submitted to Funding organizations in USA and Chile. **Journals** - Progress in Oceanography, Journal of Marine Research, Deep Sea Research, Ciencia y Tecnología del Mar. **Proposals** - National Science Foundation, New York Sea Grant, Fondo de Ciencia y Tecnología (FONDECYT), Fondo de Investigacion Pesquera.

#### **Professional societies**

Sociedad Chilena de las Ciencias del Mar. Since 1984  
American Geophysical Union (AGU). Since 2002

September 2007